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Technology, Culture and Coproduction:
Looking to the Horizon of Quality and Safety

Enhancement of eAED System in Locating and Managing Surge of COVID Patients
During the 5th Wave in Accident and Emergency Department of PYNEH

Yuen MSY (1), Ching CH (1), Kwok FY (1), Wong KY (1), Kwong E (2), Chan LW (1)
(1) Department of Accident and Emergency, Pamela Youde Nethersole Eastern Hospital
(2) Department of Information Technology, Head Office of Hospital Authority

Introduction

eAED has been implemented in Accident and Emergency Department (A&E) of PYNEH since July 2021, for patient care management and documentation electronically. It was introduced at the trough of COVID pandemic in meeting the SMART Hospital direction of Hospital Authority. PYNEH is the first major acute hospital adopting eAED system in clinical practice.

Hundreds of patients attended A&E each day in which 10 percent presented with COVID in early February 2022, they were assigned either waiting at Special Consultation Area or tents outdoors at Ambulance Packing Zone, all were managed and documented in eAED system (from Triage, consultation, investigation, treatment, administration of medication, reassessment to discharge or admission).

However, surge of patients was noted in the mid of February and worsen at the end of February, almost all COVID attendees required admission. Access block was an issue, hundreds of patients were waiting for admission (127 at peak), they were scattered everywhere; from waiting hall, resus corridor, cubicles to Visitor Carpark Area. Search of patients was a challenge.

Objective

To report on the implementation of eAED system at the 5th wave in A&E

Method

To tackle the patient search issue, meeting was first held with medical and nursing staffs, numbering system with pre-fix locating the patients was sorted out (e.g. 1xx at ACP, 2xx at VCP, 5XX at cubicle 22, 7xx at waiting hall).

Another meeting was held with Information Technology Team of HA and requested having the enhancement of eAED system of increasing the observation number from 99 to 999 and marking the location, both was raised and addressed in one afternoon.

The networking system was also extended to cover the outdoors area. Cubicle nursing teams were setup. Numbering system was triggered in Triage. Mobile units of eAED were employed working at functional and outdoors areas of A&E.

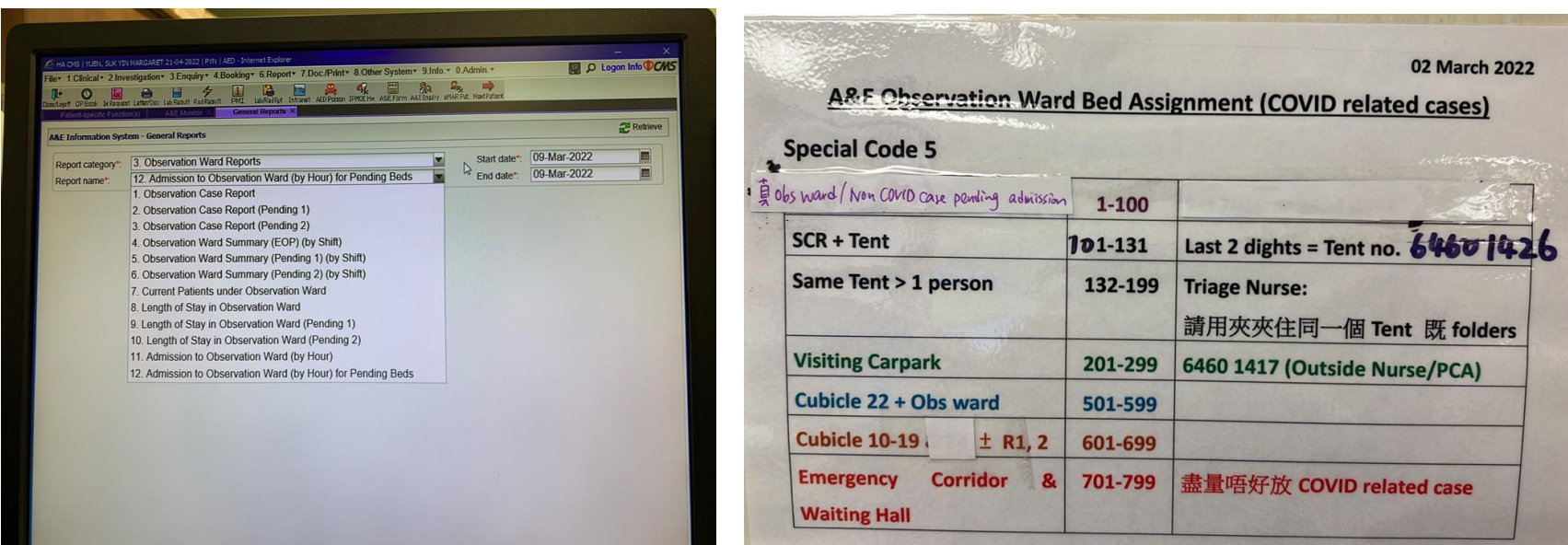
Meeting with Colleagues on eAED System



Meeting with Information Technology Team of HA



Propose having numbering system for locating patients in A&E



Request having enhancement of eAED system: increasing the number of observation beds and network coverage in A&E

Use of Mobile Unit



Results

There were 11393 patients attended A&E from February 7th to April 4th 2022, 2566 (23%) were COVID patients. 4094 (36%) patients were discharged home, 6014 (53%) needed admission and 273 (2.4%) were dead. Out of the 2566 COVID admission patients, they had a mean of staying 2.5 days and range of spending 3 to 6 days in A&E.

There were 35 eAED systems installed in A&E, where 20 were desktops and 15 were mobile units. 4 were particularly assigned using for COVID patients at outdoors area (Ambulance Parking Zone and Visitor Carpark Area), the rest of them were scattered at every functional areas for their purposes. The “Numbering System” and “Clinical Dashboard” and “To-do-list” functions of eAED system were enhanced and utilized, not only to locate the patients but also to monitor the treatments and care provided to them. All went paperless. The infection control issue was also addressed.

Conclusion

Through collaboration between A&E colleagues and HA IT team, the enhancement measures of eAED system were resulted in significant improvement in locating and managing surge of COVID patients in A&E.